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Dairy-Herd-Improvement Letter

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ARTIFICIAL INSEMINATION (AI) PARTICIPATION REPORT FOR THE  
UNITED STATES 1969 1/

A total of 7,933,878 cows were bred artificially in the United States in 1968. Of these, 7,138,636 were dairy cows and 795,242 were beef cows. This represented an increase of 90,278 dairy cows and 122,423 beef cows from the previous year. Also, for the first time over one-half of the Nation's dairy cows and heifers were bred artificially.

Semen from dairy bulls was used to inseminate 6,423,786 dairy cows. Semen from beef bulls was used to inseminate 1,510,092 beef and dairy cows.

It is likely that the total number of artificial inseminations to dairy and beef cows reported is below the true number of AI services. This occurred mainly because it was not possible to obtain reports from two organizations. Also, information on custom freezing by organizations and individuals that are not members of the National Association of Animal Breeders was not available.

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1/ Prepared by B. T. McDaniel, F. N. Dickinson, C. A. Rampendahl, and J. J. Corbin from data supplied by artificial insemination organizations, State Extension Dairywomen, and the National Association of Animal Breeders.

APR 13 '77

Issued August 1969

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Because of incomplete reporting and the lack of information, the tabular data in this report are partly estimations. Where possible, estimates were based on the averages and percentages from complete reports. When only the number of ampules of semen used were available, the number of first services was estimated to be one-half of the number of ampules reported.

Table 1 shows that 50.5 percent of the Nation's 14,123,000 dairy cows and heifers were artificially inseminated in 1968. Approximately 12.5 percent, or 892,609, of the dairy cattle so bred were registered. The number of dairy animals bred to beef bulls dropped for the fifth consecutive year. About 2.2 percent of the Nation's beef cows and heifers were artificially inseminated in 1968.

The top 10 States in number and percentage of dairy and beef cows bred artificially are shown in table 2. Wisconsin had the highest number of dairy cows inseminated, and Montana the highest number of beef cows.

The scope of artificial insemination by State for the years 1967 and 1968 is shown in table 3. The greatest increase in the number of dairy cows bred occurred in California, and Ohio had the greatest advance in beef cows.

The number of cows bred artificially in the United States since 1939 is shown by year in table 4. The continual upward trend in the percentage of dairy cattle bred artificially is illustrated in figure 1. The trend in beef cattle since reporting was commenced in 1963 is shown in figure 2.

Table 5 shows that 30 organizations bred cows artificially in 1968. These organizations serviced an estimated 407,375 herds. However, it should be noted that a herd was counted more than once when two or more AI studs bred cows in the same herd. In addition to the 7,489,889 cattle serviced directly, it is estimated that 413,401 cows were bred by semen sold to individual farmers by the studs, and that 30,588 cows were bred by semen custom-frozen.

TABLE 1.--Status of artificial breeding in the United States, January 1, 1969

State and other sources	Studs <sup>1/</sup>	Bred to dairy sires in 1968		Bred to beef sires in 1968		Dairy cattle		Beef cattle	
		Registered dairy cows <sup>2/</sup>	Total dairy cows	Dairy cows	Beef cows	All U.S. milk cows <sup>3/</sup>	Dairy cows bred as a percentage of all milk cows <sup>4/</sup>	Other U.S. cattle and calves 2 years and older <sup>5/</sup>	Beef cows bred as a percentage of other cattle and calves <sup>6/</sup>
		Number	Number	Number	Number	Thousands	Percent	Thousands	Percent
Alabama-----	0	4,827	36,901	6,100	6,263	156	27.6	903	0.7
Alaska-----	1	60	999	15	46	1.9	53.4	2.5	1.8
Arizona-----	0	2,275	15,876	1,830	1,415	55	32.2	367	.4
Arkansas-----	0	2,751	22,949	4,964	6,255	109	25.6	879	.7
California-----	2	42,215	441,128	20,517	20,097	848	54.4	993	2.0
Colorado-----	1	3,337	36,644	2,496	11,305	110	35.6	995	1.1
Connecticut-----	0	10,724	45,593	7,193	968	73	72.3	4	24.2
Delaware-----	0	2,532	7,804	1,297	85	16	56.9	5	1.7
Florida-----	0	13,852	134,632	19,065	18,295	189	81.3	893	2.0
Georgia-----	0	18,445	51,285	6,740	6,279	152	38.2	811	.8
Hawaii-----	0	1,587	11,100	-----	974	15	74.0	92	1.1
Idaho-----	0	6,668	81,465	6,822	11,706	171	51.6	564	2.1
Illinois-----	1	27,735	162,720	21,669	19,464	363	50.8	795	2.4
Indiana-----	0	15,674	98,164	12,243	15,164	274	40.3	406	3.7
Iowa-----	0	18,448	201,096	33,244	17,800	605	38.7	1,405	1.3
Kansas-----	1	8,974	77,813	6,722	43,900	225	37.6	1,710	2.6
Kentucky-----	0	12,493	103,036	16,470	17,375	400	29.9	1,005	1.7
Louisiana-----	1	9,656	62,803	9,263	16,438	198	36.4	901	1.8
Maine-----	0	8,184	42,418	3,666	448	76	60.6	9	5.0
Maryland-----	1	11,832	75,755	8,583	3,484	184	45.8	54	6.5
Massachusetts--	0	9,550	38,645	5,162	630	75	58.4	4	15.8
Michigan-----	2	39,114	253,375	28,907	8,735	499	56.6	123	7.1
Minnesota-----	1	35,145	526,823	68,292	19,017	1,146	51.9	530	3.6
Mississippi-----	1	5,424	47,155	2,772	6,578	233	21.4	1,235	.5
Missouri-----	0	14,961	115,580	10,507	30,311	412	30.6	1,785	1.7
Montana-----	0	1,452	11,950	976	63,317	48	26.9	1,556	4.1
Nebraska-----	0	5,230	45,259	7,445	21,979	218	24.2	1,882	1.2
Nevada-----	0	725	6,735	120	2,608	15	45.7	311	.8
New Hampshire--	0	5,043	21,896	2,628	279	43	57.0	2	14.0
New Jersey-----	0	11,982	45,991	5,896	397	82	63.3	8	5.0
New Mexico-----	0	2,355	24,739	146	2,255	39	63.8	690	.3
New York-----	1	127,452	655,571	65,830	4,310	1,132	63.7	57	7.6
North Carolina--	1	15,018	81,561	11,156	7,053	211	43.9	333	2.1
North Dakota---	0	1,640	25,614	1,737	20,003	168	16.3	948	2.1
Ohio-----	2	50,532	257,981	37,763	36,936	503	58.8	325	11.4
Oklahoma-----	0	3,376	26,858	3,612	10,624	166	18.4	2,070	.5
Oregon-----	0	5,645	64,311	6,155	12,288	120	58.7	675	1.8
Pennsylvania---	2	138,082	484,605	66,463	10,413	815	67.6	101	10.3
Puerto Rico---	1	11,043	70,402	2	398	-----	-----	-----	-----
Rhode Island---	0	1,063	4,551	551	98	8	63.8	1	9.8
South Carolina--	0	4,622	29,686	5,776	2,955	76	46.7	256	1.2
South Dakota---	0	2,550	29,648	3,544	24,738	214	15.5	1,686	1.5
Tennessee-----	3	8,536	76,138	15,211	12,344	352	26.0	922	1.3
Texas-----	0	6,265	96,467	2,932	40,575	374	26.6	5,517	.7
Utah-----	1	4,767	53,027	3,803	4,379	82	69.3	329	1.3
Vermont-----	0	22,594	128,406	12,290	1,544	232	60.6	4	38.6
Virginia-----	1	12,825	105,965	14,041	4,618	253	47.4	484	1.0
Washington-----	2	11,932	135,615	11,256	15,453	200	73.4	370	4.2
West Virginia--	0	2,459	18,734	4,945	2,708	72	32.9	196	1.4
Wisconsin-----	4	108,521	1,208,392	125,627	25,980	2,094	63.7	226	11.5
Wyoming-----	0	437	4,829	406	11,628	20	26.2	677	1.7
Reported AI activity, but State unknown <sup>7/</sup>	-	-----	17,096	-----	3,237	-----	-----	-----	-----
Armour & Co. <sup>8/</sup>	-	-----	-----	-----	6,600	-----	-----	-----	-----
International Beef Breeders <sup>8/</sup>	-	-----	-----	-----	45,690	-----	-----	-----	-----
Semen services reported from ranchers' bulls <sup>8/</sup>	-	-----	-----	-----	116,803	-----	-----	-----	-----
United States--	30	892,609	6,423,786	714,850	795,242	14,123	50.5	36,097	2.2

<sup>1/</sup> States without studs purchase semen from studs in other States. See table 7 for names and addresses of studs.

<sup>2/</sup> Data for registered cows may have been all or partially estimated when incomplete report was given.

<sup>3/</sup> Preliminary figures for number of cows and heifers 2 years old and over kept for milk; estimated by the Statistical Reporting Service (USDA).

<sup>4/</sup> Percentage of all dairy cows bred included in the artificial insemination program.

<sup>5/</sup> Preliminary figures for other cattle and calves 2 years and older; estimated by the Statistical Reporting Service (USDA).

<sup>6/</sup> Percentage of all beef cows bred included in the artificial insemination program.

<sup>7/</sup> AI breeding activity reported for: Curtiss, 4,000 cows; Midwest Breeders, 503 cows; Select Sires, 15,830 cows. Total: 20,333 cows. Data were received from studs.

<sup>8/</sup> Information obtained from National Association of Animal Breeders, P.O. Box 1033, Columbia, Missouri 65201.



TABLE 2.--States with the highest number and percentage of dairy and beef cows bred artificially in 1968

Rank	State	Cows bred artificially	Rank	State	Cows bred artificially
<u>Number</u>					
<u>DAIRY COWS</u>					
1	Wisconsin	1,334,019	1	Florida	81.3
2	New York	721,401	2	Hawaii	74.0
3	Minnesota	595,115	3	Washington	73.4
4	Pennsylvania	551,068	4	Connecticut	72.3
5	California	461,645	5	Utah	69.3
6	Ohio	295,744	6	Pennsylvania	67.6
7	Michigan	282,282	7	New Mexico	63.8
8	Iowa	234,340	8	Rhode Island	63.8
9	Illinois	184,389	9	New York	63.7
10	Florida	153,697	10	Wisconsin	63.7
<u>BEEF COWS</u>					
1	Montana	63,317	1	Vermont	38.6
2	Kansas	43,900	2	Connecticut	24.2
3	Texas	40,575	3	Massachusetts	15.8
4	Ohio	36,936	4	New Hampshire	14.0
5	Missouri	30,311	5	Wisconsin	11.5
6	Wisconsin	25,980	6	Ohio	11.4
7	South Dakota	24,738	7	Pennsylvania	10.3
8	Nebraska	21,979	8	Rhode Island	9.8
9	California	20,097	9	New York	7.6
10	North Dakota	20,003	10	Michigan	7.1

TABLE 3.--Comparison of artificial breeding in the United States for years 1967 and 1968

State and other sources	Dairy cows bred artificially				Beef cows bred artificially			
	In 1967	In 1968	Increase or decrease	Increase or decrease <sup>1/</sup>	In 1967	In 1968	Increase or decrease	Increase or decrease <sup>2/</sup>
	Number	Number	Number	Percent	Number	Number	Number	Percent
Alabama-----	45,252	43,001	-2,251	+0.3	3,650	6,263	+2,613	+0.3
Alaska-----	1,189	1,014	-175	-6.1	9	46	+37	+1.4
Arizona-----	10,227	17,706	+7,479	+13.6	5,033	1,415	-3,618	-9
Arkansas-----	23,417	27,913	+4,496	+5.1	4,264	6,255	+1,991	+2
California-----	391,970	461,645	+69,675	+8.7	19,014	20,097	+1,083	+1
Colorado-----	35,106	39,140	+4,034	+2.5	7,264	11,305	+4,041	+4
Connecticut-----	50,398	52,786	+2,388	+6.8	140	968	+828	+20.7
Delaware-----	9,052	9,101	+49	+3.7	94	85	-9	-7
Florida-----	165,360	153,697	-11,663	-6.2	15,294	18,295	+3,001	+2
Georgia-----	61,663	58,025	-3,638	-1.6	5,862	6,279	+417	+1
Hawaii-----	10,647	11,100	+453	+7.5	1,480	974	-506	-6
Idaho-----	64,022	88,287	+24,265	+13.0	9,353	11,706	+2,353	+3
Illinois-----	190,129	184,389	-5,740	+1.5	17,576	19,464	+1,888	+2
Indiana-----	110,530	110,407	-123	+1.5	12,870	15,164	+2,294	+7
Iowa-----	229,305	234,340	+5,035	+3.4	23,002	17,800	-5,202	-4
Kansas-----	90,936	84,535	-6,401	-3	37,493	43,900	+6,407	+4
Kentucky-----	122,344	119,506	-2,838	+8	14,658	17,375	+2,717	+2
Louisiana-----	72,338	72,066	-272	+1.3	8,465	16,438	+7,973	+8
Maine-----	50,516	46,084	-4,432	-3.3	94	448	+354	+4.1
Maryland-----	84,640	84,338	-302	+3	2,521	3,484	+963	+1.8
Massachusetts---	46,803	43,807	-2,996	-1	232	630	+398	+10.0
Michigan-----	295,272	282,282	-12,990	-3	6,361	8,735	+2,374	+1.6
Minnesota-----	611,829	595,115	-16,714	+1	15,362	19,017	+3,655	+6
Mississippi-----	56,450	49,927	-6,523	-1.6	8,138	6,578	-1,560	-2
Missouri-----	130,989	126,087	-4,902	+1	19,907	30,311	+10,404	+6
Montana-----	11,472	12,926	+1,454	+4.4	53,435	63,317	+9,882	+6
Nebraska-----	45,446	52,704	+7,258	+4.9	22,386	21,979	-407	+1
Nevada-----	5,076	6,855	+1,779	+11.9	2,109	2,608	+499	+1
New Hampshire---	25,510	24,524	-986	+3	155	279	+124	+6.2
New Jersey-----	57,315	51,887	-5,428	-4	350	397	+47	0
New Mexico-----	26,308	24,885	-1,423	-2.0	891	2,255	+1,364	+2
New York-----	727,478	721,401	-6,077	-1.6	2,895	4,310	+1,415	+2.2
North Carolina---	93,038	92,717	-321	+4	7,571	7,053	-518	-3
North Dakota---	19,781	27,351	+7,570	+5.5	19,999	20,003	+4	0
Ohio-----	296,033	295,744	-289	+3.5	17,916	36,936	+19,020	+6.0
Oklahoma-----	20,194	30,470	+10,276	+6.6	12,137	10,624	-1,513	-1
Oregon-----	65,553	70,466	+4,913	+6.7	10,637	12,288	+1,651	+2
Pennsylvania---	535,335	551,068	+15,733	+2.6	10,120	10,413	+293	0
Puerto Rico-----	59,607	70,404	+10,797	----	200	398	+198	----
Rhode Island----	4,791	5,102	+311	+15.9	54	98	+44	+4.4
South Carolina---	35,594	35,462	-132	+3.4	4,586	2,955	-1,631	-7
South Dakota-----	33,882	33,192	-690	+4	16,135	24,738	+8,603	+5
Tennessee-----	102,460	91,349	-11,111	-1.3	8,832	12,344	+3,512	+3
Texas-----	98,481	99,399	+918	+2.3	36,437	40,575	+4,138	0
Utah-----	52,398	56,830	+4,432	+4.6	4,549	4,379	-170	-1
Vermont-----	128,136	140,696	+12,560	+6.3	398	1,544	+1,146	+28.6
Virginia-----	115,569	120,006	+4,437	+3.6	4,800	4,618	-182	0
Washington-----	122,915	146,871	+23,956	+14.9	16,928	15,453	-1,475	-2
West Virginia---	24,288	23,679	-609	+1.4	2,531	2,708	+177	0
Wisconsin-----	1,371,272	1,334,019	-37,253	-2	20,799	25,980	+5,181	+1.5
Wyoming-----	5,842	5,235	-607	-4	9,883	11,628	+1,745	+3
Reported AI activity, but State unknown <sup>3/</sup>	4,200	17,096	+12,896	----	16,329	3,237	-13,092	----
Armour & Co. <sup>3/</sup>	-----	-----	-----	----	4/23,658	6,600	-17,058	----
International Beef Breeders <sup>3/</sup>	-----	-----	-----	----	48,335	45,690	-2,645	----
Semen services reported from ranchers' bulls <sup>3/</sup>	-----	-----	-----	----	59,628	116,803	+57,175	----
United States----	7,048,358	7,138,636	+90,278	+2.4	4/672,819	795,242	+122,423	+3

<sup>1/</sup> Derived from all dairy cows bred in the artificial insemination program as a percentage of all milk cows in the United States.

<sup>2/</sup> Derived from all beef cows bred in the artificial insemination program as a percentage of other cattle and calves 2 years and older in the United States.

<sup>3/</sup> For year 1968 see table 1 and footnotes. For year 1967, see table 1 and footnotes in the May 1968 Dairy-Herd-Improvement Letter covering the Artificial Insemination Participation Report for 1967.

<sup>4/</sup> Additional or revised data. See Errata and table 7 in the November 1968 Dairy-Herd-Improvement Letter for details.

TABLE 4.--Status of artificial breeding program in the United States, 1939-1969 inclusive

Year	Studs	Sires in service			Herds <sup>1/</sup>	Dairy cows bred to-		Beef cows bred to beef bulls	Total cattle bred	Cows bred per sire
		Dairy	Beef	Total		Dairy bulls	Beef bulls			
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
1939	7	--	--	33	646	--	--	--	7,359	228
1940	25	--	--	138	2,971	--	--	--	33,977	246
1941	35	--	--	237	5,997	--	--	--	70,751	299
1942	46	--	--	412	12,118	--	--	--	112,788	274
1943	59	--	--	574	23,448	--	--	--	182,524	318
1944	56	--	--	657	28,627	--	--	--	218,070	332
1945	67	--	--	729	43,998	--	--	--	360,732	495
1946	78	--	--	900	73,293	--	--	--	537,376	597
1947	84	--	--	1,453	140,571	--	--	--	1,184,168	815
1948	91	--	--	1,745	224,493	--	--	--	1,713,581	982
1949	90	--	--	1,940	316,177	--	--	--	2,091,175	1,078
1950	97	--	--	2,104	409,300	--	--	--	2,619,555	1,245
1951	94	--	--	2,187	548,300	--	--	--	3,509,573	1,605
1952	94	--	--	2,324	671,100	--	--	--	4,295,243	1,848
1953	96	--	--	2,598	755,000	--	--	--	4,845,222	1,865
1954	93	--	--	2,661	805,000	--	--	--	5,155,240	1,937
1955	79	--	--	2,450	845,900	--	--	--	5,413,874	2,210
1956	79	--	--	2,553	900,400	--	--	--	5,762,656	2,257
1957	75	--	--	2,651	946,000	--	--	--	6,055,982	2,284
1958	71	--	--	2,676	975,372	--	--	--	6,645,568	2,483
1959	64	--	--	2,460	930,059	--	--	--	6,932,294	2,816
1960	62	--	--	2,544	910,000	--	--	--	7,144,679	2,808
1961	56	--	--	2,486	863,781	7,047,148	2/435,492	--	7,482,740	3,010
1962	56	2,036	420	2,456	862,150	6,837,681	2/911,006	--	7,748,687	3,155
1963	51	2,158	401	2,559	621,141	6,468,545	969,748	235,289	7,673,582	2,999
1964	50	2,140	398	2,538	654,311	6,165,599	1,117,395	464,959	7,747,953	3,053
1965	3/46	1,867	449	2,316	591,859	6,301,178	963,657	615,147	7,879,982	3,402
1966	3/44	1,949	439	2,388	540,265	6,413,453	873,127	4/695,181	4/7,981,761	4/3,342
1967	35	2,012	364	2,376	458,782	6,259,425	788,933	4/672,819	5/4/7,813,265	4/3,313
1968	3/33	2,028	352	2,380	72.1	6,423,786	714,850	795,242	6/7,933,878	3,334
1969	3/30	1,955	390	2,345	78.2	--	--	--	--	--

1/ Prior to 1963, number of herds largely reflected membership rather than those actually serviced.

2/ Probably includes some beef to beef inseminations.

3/ Includes one all-beef stud.

4/ Data are revised. See Errata and table 7 in the November 1968 Dairy-Herd-Improvement Letter for details.

5/ Total cattle bred in 1967 includes 150,088 first services, by State only, where breakdowns were not reported.

6/ Not shown are inseminations to 9,612 swine and 442 goats.



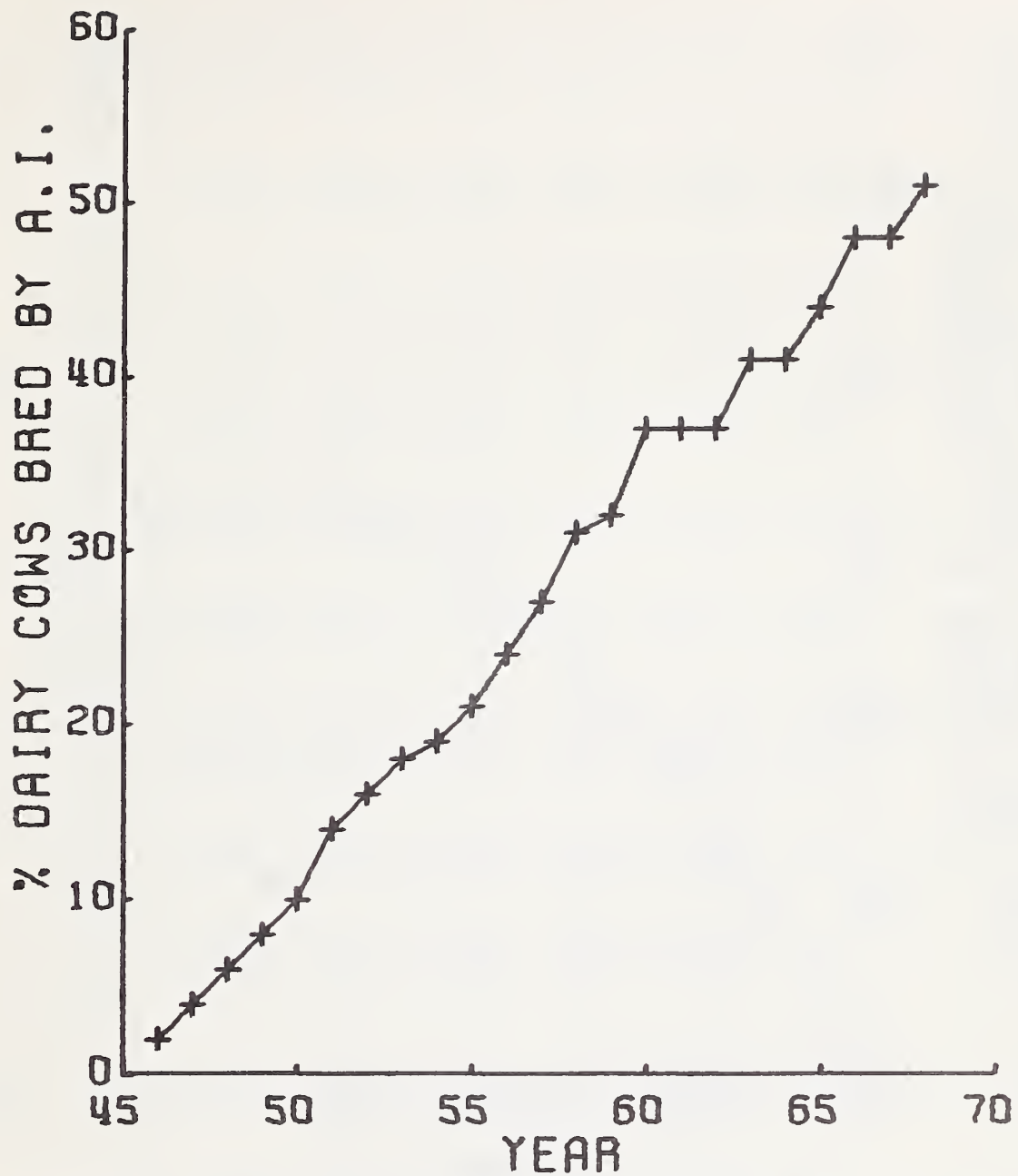


FIGURE 1.--Yearly trends in the percentage of U.S. dairy cows bred artificially since 1946.

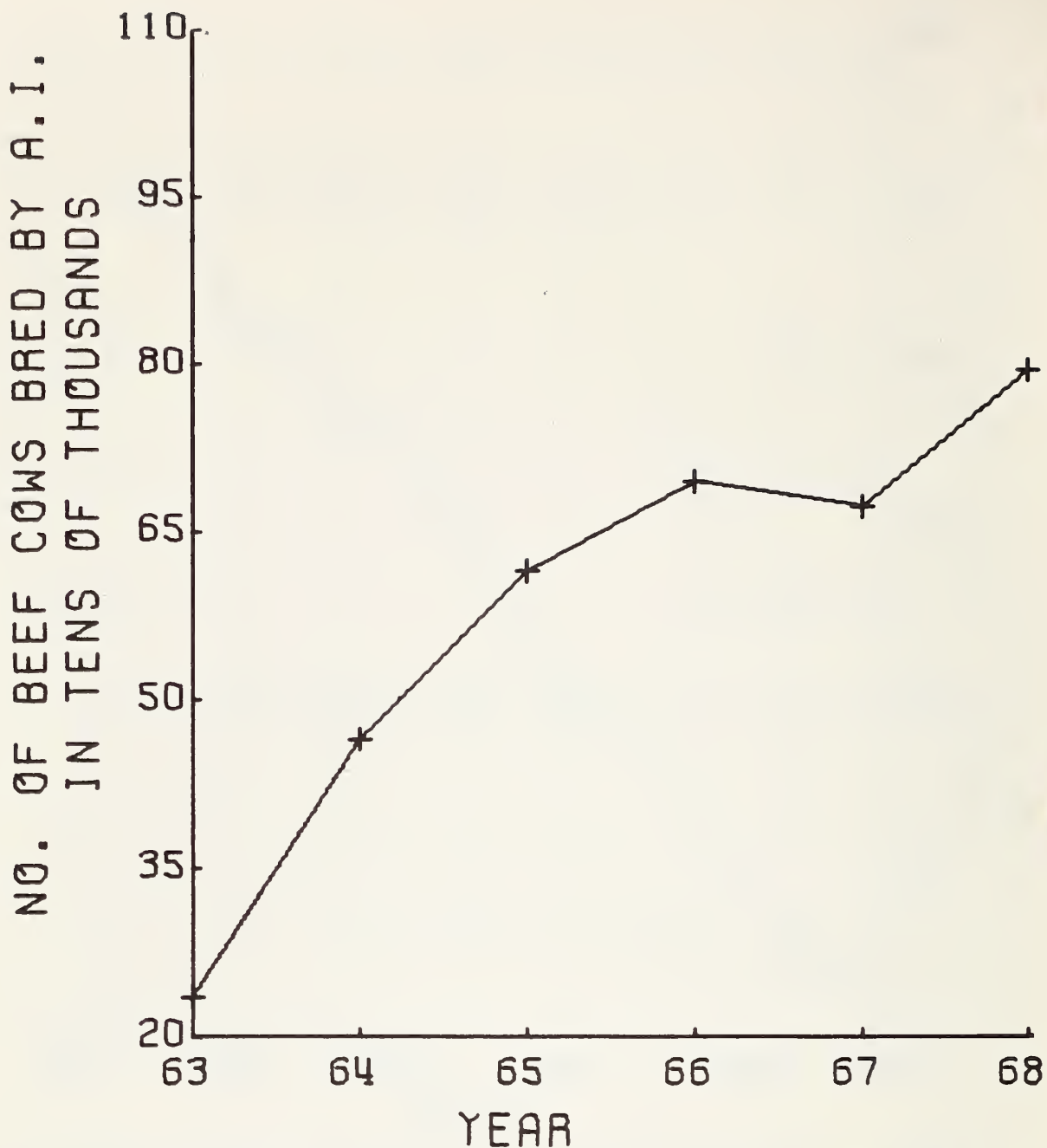


FIGURE 2.--Yearly trends in the number of U.S. beef cows bred artificially since 1963.

TABLE 5.--Cows bred in artificial-breeding organization bull studs during 1968

Stud code	Name of stud <sup>1/</sup>	Herds serviced	Cows bred in 1968						Semen sales and custom-freezing		Total breedings of--		Estimated total number of cows bred	Insemina- tions of--	
			First services			Total first services	Dairy to beef	Beef to dairy	Beef to beef	Dairy cows	Beef cows	Swine		Goats	
			Dairy total	Dairy to beef	Beef to beef										
			----- Number -----												
2110	Eastern AIC-----	33,951	659,529	69,085	3,112	731,726	4,012	-----	732,626	3,112	735,738	----	----		
2209	Atlantic-----	13,251	190,882	25,835	5,815	222,532	200	40	216,917	5,855	222,772	----	----		
2311	NEBA-----	2/9,355	154,606	21,980	1,165	177,751	2,394	-----	178,980	1,165	180,145	----	17		
3102	NOBA-----	10,477	213,185	39,167	10,315	262,667	11,854	16,303	264,206	26,618	290,824	----	----		
3303	Curtiss-----	37,850	960,876	115,812	71,529	1,148,217	4,000	-----	1,080,688	71,529	1,152,217	----	408		
3401	Michigan ABC-----	13,140	167,765	19,896	4,127	191,788	1,355	-----	189,016	4,127	193,143	----	----		
3407	General Genetics--	800	22,900	1,337	200	24,437	3,243	508	27,480	708	28,188	----	----		
3503	East Central-----	4,500	76,166	13,226	500	89,892	5,971	-----	95,363	500	95,863	----	----		
3505	Tri-State-----	20,786	400,152	-----	9,368	409,520	-----	-----	400,152	9,368	409,520	9,374	----		
3521	Midwest Breeders--	39,877	558,057	81,701	19,212	658,970	70,690	25,605	710,448	44,817	755,265	----	----		
3575	ABS-----	2/81,844	1,246,139	112,905	195,935	1,554,979	-----	-----	1,359,044	195,935	1,554,979	----	----		
4101	Minnesota Valley--	31,540	256,637	36,408	3,973	297,018	1,040	11,920	294,085	15,893	309,978	----	----		
4801	Kansas ABSU-----	2,609	38,294	2,560	11,870	52,724	4,187	26,853	45,041	38,723	83,764	----	2		
5102	Maryland-W. Va---	4,035	68,290	11,455	4,631	84,376	4,102	989	83,847	5,620	89,467	----	5		
5201	Virginia ABA-----	6,751	65,531	10,134	1,788	77,453	3,833	553	79,498	2,341	81,839	----	----		
5501	N. C. Instit. B.P-----	10	926	-----	-----	926	45	-----	971	-----	971	----	----		
6102	Select Sires-----	37,797	250,880	43,904	31,476	326,260	102,960	37,877	397,744	69,353	467,097	220	4		
6301	East Tennessee---	2/2,106	17,725	2/4,519	2/3,400	25,644	-----	3,975	22,244	7,375	29,619	----	----		
6302	Tennessee ABA---	5,000	22,194	7,263	350	29,807	-----	-----	29,457	350	29,807	----	----		
6303	West Tennessee---	782	5,182	680	1,890	7,752	-----	-----	5,862	1,890	7,752	----	----		
6502	Mississippi ABC---	275	16,000	1,500	275	17,775	4,225	75	21,725	350	22,075	----	----		
7201	Louisiana ABC---	4,752	58,490	8,953	5,328	72,771	1,860	10,570	69,303	15,898	85,201	----	----		
8701	Cache Valley-----	7,305	52,462	5,035	26,714	84,211	3,192	28,131	60,889	54,845	115,534	----	----		
9111	Carnation-----	2/18,830	270,948	61,506	25,314	357,768	-----	-----	332,454	25,314	357,768	----	----		
9113	All West-----	17,023	132,369	2/16,788	2/19,543	168,700	-----	-----	149,157	19,543	168,700	----	6		
9303	Excelsior-----	201	35,226	200	40	35,466	18,196	275	53,622	315	53,937	----	----		
9316	Genetics, Inc.---	2,159	174,785	2,999	1,109	178,893	24,621	3,098	202,405	4,207	206,612	----	----		
9401	P.R. AI Center---	357	30,000	2	398	30,400	5,237	-----	35,239	398	35,637	18	----		
9601	Matanuska Valley--	12	373	-----	-----	373	-----	-----	373	-----	373	----	----		
3310	Armour & Co.3/-	-----	-----	-----	6,600	6,600	-----	-----	-----	6,600	6,600	----	----		
8406	International Beef Breeders 3/-	-----	-----	-----	45,690	45,690	-----	-----	-----	45,690	45,690	----	----		
	Private services <sup>3/</sup>	-----	-----	-----	116,803	116,803	-----	-----	-----	116,803	116,803	----	----		
United States-----		407,375	6,146,569	714,850	628,470	7,489,889	277,217	166,772	7,138,636	795,242	7,933,878	9,612	442		

<sup>1/</sup> See table 7 for list of names and addresses of studs.<sup>2/</sup> Data may have been all or partially estimated when incomplete report was given.<sup>3/</sup> Information obtained from National Association of Animal Breeders, P.O. Box 1033, Columbia, Missouri 65201.

Three AI organizations reported that they artificially inseminated 9,612 swine, which is 1,657, or 20.8 percent, more than in 1967. Services to 442 goats were indicated, also an increase from 1967.

Table 6 shows that a total of 2,345 bulls were in AI studs in 1968. This probably exceeds the number of bulls actually used to inseminate cows in 1968, because it includes all bulls reported in studs at any time during the year. It was possible to remove bulls without services from the counts only when the stud reported an actual or estimated number of services by each bull.

The distribution of 1,955 dairy bulls by type of service and breed is shown in table 6. About 53 percent of the dairy bulls were available in regular service, 37 percent were involved in progeny testing only, and 7 percent were available only on a special service basis. Only 1,409 of the dairy bulls were reported as having semen available on January 1, 1969.- Most of the 390 beef bulls were reported as in regular service.

Semen from individual bulls is being more widely distributed throughout the country, as evidenced by the fact that 130 bulls were used by two or more studs.

Table 7 lists artificial-breeding organizations active in 1968.

Table 8 lists the States by percentage of dairy cows bred artificially in 1968.

An updated list of Extension Dairymen in charge of AI activity in each State is given on page 14.





TABLE 7.--Artificial-breeding organization bull studs in the United States

State	Stud code	Name and address
Alaska-----	9601	Matanuska Valley Breeders Association, Box AE, Palmer 99645.
California-----	9303	Excelsior Farms Artificial Breeding Service, Rt. 1, Box 128, Corona 91720.
	9316	Genetics, Inc., Box 134, Hughson 95326.
Illinois-----	3303	Curtiss Breeding Service, Inc., Cary 60013.
Kansas-----	4801	Kansas Artificial Breeding Service Unit, Kansas State University, Manhattan 66506.
Louisiana-----	7201	La. Animal Breeders Co-op., Inc., Louisiana State University, Box BD, Baton Rouge 70803.
Maryland-----	5102	Maryland-West Virginia Bull Stud, Inc., Box 555, Frederick 21701.
Michigan-----	3407	General Genetics, Box 23, Jenison 49428.
	3401	Michigan Animal Breeders Co-op., Inc., Box 511, East Lansing 48823.
Minnesota-----	4101	Minnesota Valley Breeders Association, New Prague 56071.
Mississippi-----	6502	Mississippi Animal Breeders Co-op., Drawer BA, State College 39762.
New York-----	2110	Eastern Artificial Insemination Co-op., Inc., Box 518, Ithaca 14850.
North Carolina---	5501	N. C. Institutional Breeding Assoc., 231 Polk Hall, North Carolina State University, Raleigh 27607.
Ohio-----	3102	NOBA, Inc., Box 607, Tiffin 44883.
	6102	Select Sires, Inc., 1224 Alton-Darby Road, Columbus 43228.
Pennsylvania-----	2309	Atlantic Breeders Co-op., Box 254, Lancaster 17604.
	2311	Northeastern Breeders Assoc., Inc., R.D. 2, Tunkhannock 18657.
Puerto Rico-----	9401	Puerto Rico Artificial Insemination Center, Inc., Box 958, Dorado 00646.
Tennessee-----	6301	East Tennessee ABA, Rt. 10, Tipton Station Road, Knoxville 37920.
	6302	Tennessee Artificial Breeding Assoc., Granny White Pike, Box 67, Brentwood 37027.
	6303	West Tennessee ABA, Box 38, Yorkville 38389.
Utah-----	8701	Cache Valley Breeding Association, 1950 North Main, Logan 84321.
Virginia-----	5201	Virginia Animal Breeders Assoc., Inc., Drawer 370, Rocky Mount 24151.
Washington-----	9113	All West Breeders, Box 197, Burlington 98233.
	9111	Carnation Farms Breeding Service, Carnation 98014.
Wisconsin-----	3575	American Breeders Service, Inc., De Forest 53532.
	3503	East Central Breeders Association Co-op., Box 191, Highway 26, Waupun 53963.
	3521	Midwest Breeders Co-op., Box 469, Shawano 54166.
	3505	Tri-State Breeders Co-op., Rt. 3, Box 50, Baraboo 53913.
ALL-BEEF STUDS		
Colorado-----	8406	International Beef Breeders, Inc., Box 29007, Denver 80229.
Illinois-----	3310	Armour & Co. Beef Cattle Improvement Research, Box 9222, Chicago 60690.

TABLE 8.--Percentage of dairy cows bred artificially in 1968,  
by States, in order of rank

State	Rank	State	Rank
	<u>Percent</u>		<u>Percent</u>
Florida-----	81.3	South Carolina----	46.7
Hawaii-----	74.0	Maryland-----	45.8
Washington-----	73.4	Nevada-----	45.7
Connecticut-----	72.3	North Carolina----	43.9
Utah-----	69.3	Indiana-----	40.3
Pennsylvania-----	67.6	Iowa-----	38.7
New Mexico-----	63.8	Georgia-----	38.2
Rhode Island-----	63.8	Kansas-----	37.6
New York-----	63.7	Louisiana-----	36.4
Wisconsin-----	63.7	Colorado-----	35.6
New Jersey-----	63.3	West Virginia-----	32.9
Vermont-----	60.6	Arizona-----	32.2
Maine-----	60.6	Missouri-----	30.6
Ohio-----	58.8	Kentucky-----	29.9
Oregon-----	58.7	Alabama-----	27.6
Massachusetts-----	58.4	Montana-----	26.9
New Hampshire-----	57.0	Texas-----	26.6
Delaware-----	56.9	Wyoming-----	26.2
Michigan-----	56.6	Tennessee-----	26.0
California-----	54.4	Arkansas-----	25.6
Alaska-----	53.4	Nebraska-----	24.2
Minnesota-----	51.9	Mississippi-----	21.4
Idaho-----	51.6	Oklahoma-----	18.4
Illinois-----	50.8	North Dakota-----	16.3
Virginia-----	47.4	South Dakota-----	15.5
		United States-----	50.5

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